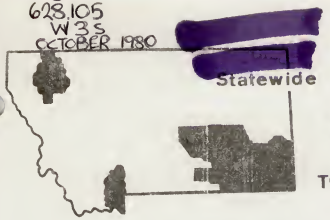

Statewide 208

NEWSLETTER

TO ACHIEVE AND PRESERVE
CLEAN WATERS

October 1980 Issue #23

FOUR CONSERVATION DISTRICTS LEADING DRIVE FOR WATER-QUALITY FUNDS

Four conservation districts have begun a drive to shake loose some money from the Montana Legislature to implement water-quality projects after they found the money was not available from other agencies.

The Richland County, Eastern Sanders, Teton and Flathead Conservation Districts have drafted resolutions calling for state appropriations to pay for correction of high-priority problems.

The resolutions, approved at the districts' areawide meetings, are being taken before the state convention of the Montana Association of Conservation Districts in November. The four districts hope a unified plea for legislative help will come out of that convention.

The dilemma arose when districts began contacting the 23 possible funding sources listed in the MACD and Statewide 208 Newsletters. The money available from many of those sources turned out to be "for planning only" and couldn't be used for the actual work the districts feel they are ready to proceed with on several small projects. "And where you could get money to do the work," said Peter J. Krudde, vice chairman of the Eastern Sanders District, "it had to be paid back. That wasn't very inviting."

Krudde said he wrote to most of the funding sources on the list, and the result was "very disappointing." He said his district wants desperately to get started tackling its water-quality problems, and he hopes the legislature, which convenes in January, will give it a hand.

Richland County Conservation District, headquartered at Sidney, was the first to draft a resolution. It reads:

WHEREAS, the 208 Water Quality Program has required the conservation districts to develop water quality plans for each county to comply

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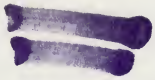
The Statewide 208 Project is funded by the U. S. Environmental Protection Agency under provision of Section 208, PL 92-500 for the purposes of water quality management in that portion of Montana exclusive of the three designated planning districts. Project Coordinator is Kit Walther; Public Participation Coordinator is Charles Wood; Montana Water Quality Bureau; telephone (406) 449-2406.



with the Water Quality Act, and

WHEREAS, many conservation districts have developed those water quality plans, and

WHEREAS, there is no funding available from EPA or other agencies to implement provisions for high-priority problems identified in district plans, and

WHEREAS, it's time to implement action on these plans,

THEREFORE, be it resolved that the Montana Association of Conservation Districts, the Department of Natural Resources and Conservation, and the Water Quality Bureau of the Department of Health and Environmental Sciences work together to get funding from the State of Montana to pass through to conservation districts ready, willing and able to implement action on their high-priority water-quality problems.

"There is money available for implementation through some old, established programs," said Terry Wheeler of the Department of Natural Resources and Conservation (DNRC), "but there isn't enough." He said a district might be able to get $3,500 from the Agriculture Conservation Program or the Great Plains Program, but that $3,500 doesn't go very far on a water-quality project.

"The trouble is," said Wheeler, "that most of those programs are set up to deal with a multitude of resources, not just water. When you funnel money from those programs into water-quality work, you take it away from work on other resources." He and other state officials working with conservation districts agree that the state needs its own, separate water-quality "work fund."

Wheeler added, "There is $6 million worth of applications in for $2½ million in Renewable Resource Development funds. So can you really say that there is money available?"

SOME DISTRICTS AREN'T WAITING AROUND FOR MONEY

Several districts, especially Eastern Sanders, Richland County and Lincoln County (see Doings in the Districts on Page 19), aren't waiting around for government funds before starting work on their water-quality plans.

Eastern Sanders, headquartered at Plains, is getting ready to kick off a concentrated education program that will last until April 1. Vice chairman Peter Krudde sees it as a logical first step toward implementing their entire water-quality plan.

"First, we've got to make people aware of what's going on," Krudde said. "And we think we can get their attention during the winter." Krudde hopes

that, by spring, the districts can come up with one or two specific project proposals with help from public input generated by the education program. "But most of all," Krudde added, "we're hoping that a good education program will inspire some landowners to try to go it on their own -- to solve their own water-quality problems."

But there's a rub. Krudde estimates the education program might cost up to $4,000. The county's two-mill levy only brings the conservation district a paltry $3,800 a year. "We're going to have to work to get that mill levy up," Krudde concluded.

SUPPORT FOR "MATCH MONEY" NOT EXACTLY POURING IN

Only 15 of the 58 conservation districts have mailed in to the Water Quality Bureau (WQB) written support for the bureau's application for $45,700 to supply districts with "match money" for 208-fund grants.

The money would have to be earmarked by the legislature and taken from DNRC's Renewable Resource Development fund. Some state officials feel the match-money request is in trouble unless more districts send in the support. A letter requesting such support was mailed to the districts this summer.

Terry Wheeler of DNRC's Conservation Districts Division and WQB's Ken Chrest are talking to districts about specific projects the districts have in mind that may qualify for the 208 study money administered by the Water Quality Bureau. The money -- a total of $130,000 at this point -- is designed to help bring the individual districts up to the point of implementation of the studies' recommendations.

Grants from this 208 fund have to be matched on a 75%-25% basis by the districts. Some of the districts say they are unable to come up with their 25% share, so WQB applied for the $45,700 to cover it.

SALINE SEEP PROJECT AGAIN SEARCHING FOR A BENEFACTOR

The Triangle Saline Seep Project also will be looking to the legislature for funding this session.

The project -- the first real hope for tackling what many eastern Montana counties consider their Number One Problem -- is due to run out of funds next July. Ted Dodge, the project's team leader working out of Conrad, said the funding probably will be extended to October 1981.

The project was funded for two years with a $241,000 appropriation from the 1979 Legislature. The project's board of supervisors has submitted to DNRC a new funding proposal for $300,000 to be presented to the 1981 Legislature. Dodge said that amount would allow the nine-county Triangle Conservation District -- set up to run the program -- to purchase its own drill rig and another pickup truck. Right now, the district has only one pickup for a three-person team that's covering a large area of northcentral

Montana. And the district is having to borrow a drilling rig from the U.S. Department of Agriculture and lease a rig from a private firm.

The project's team works with farmers and ranchers to reduce seeps by implementing techniques advocated by researchers. The team works up a map showing surface features of the seep area, then drills observation wells and monitors the fluctuations in the water table. Once the data is produced, the team can advise the farmer or rancher what to do.

In the past year-and-a-half, the team has received almost 170 applications for assistance. They've started working with around 90 of those applicants, sinking obervation wells in nine counties from which applications have been made. "This is the kind of thing most conservation districts aren't geared up to handle," Dodge said, although many counties have identified saline seep as one of their top-priority water-quality problems.

Dodge said he and his staff will write up plans this winter for the counties to deal with the individual seep areas. "We'll certainly do follow-ups," Dodge said, "but from then on, most of the assistance to the farmer must come from district conservationists and extension agents."

Although saline seep has taken 200,000 acres of Montana farmland out of production, has degraded state waters with its salts, and is spreading rapidly, Dodge thinks most Montanans know nothing about the problem. "The landowners who are hurt by saline seep certainly know about it, though," Dodge concluded, "and they are the ones who'll give our project lots of support when we go asking for two more years of funding."

SEEP-DRAIN PERMITS ISSUED, BUT WATER JUST TOO SALTY

The best advice for anyone wishing to drain saline water away from a seep area may well be "Forget it!".

The Water Quality Bureau has the authority to grant permits for such drains (it is against state regulations to drain pollutants without a permit). But the cases of the first two farmers that applied for the permits show that it would be almost impossible for such draining to occur -- even if the permits were granted.

Ken Chrest, WQB's agricultural specialist, said the first two applicants, following WQB guidance, took water samples at the seeps and the receiving streams and sent them in to the state for analysis. The bureau also made a field inspection of the sites. "Based on the water analyses, concentrations of salts exceeded the effluent limitations for the receiving streams," Chrest said, "and those drainings could violate the state's Water Quality Act."

The farmers will receive permits, anyway. But they probably couldn't drain the seeps without violating water-quality laws.

It seems like a Catch-22, but really it's more of an attempt by the

state to be fair."We considered denying permits at first," Chrest said, "but this was denying farmers the same due process we give industry." Industries are issue wastewater-discharge permits by the WQB, but are only allowed to dump wastewater that meets strict effluent limitations. Those limitations vary with each permit depending on the natural existing condition of the stream, and protect the stream from further degradation.

Farmers, therefore, may be issued drain permits, but with effluent limitations.

Chrest emphasized that these permits are required only for the draining of saline seeps, and not for the draining of freshwater potholes. "But if there is any doubt whether a pothole has clean water or saline water in it," Chrest added, "a farmer should take a water sample and send it to us." A person could violate the Water Quality Act no matter what he drains if the drainage degrades any state waters.

"The doctors tell me I'm polluted."

The limits outlined on the permits would be so strict -- because of the great difference between saline water and surface water -- that farmers could never meet them with present technology. "Industry has the advantage," Chrest said, "in that they can afford to clean up their own effluent."

Chrest went to some length to point out that issuance of a saline seep drain permit does not mean "go ahead and do it." The permit, he said, requires the holder to monitor his draining operation (including water sampling) and WQB also will come out to the site and take samples. If it is found that a discharge violates the permit limits, then the permit holder could face a $10,000-a-day fine under the Water Quality Act (the same fine imposed on industry).

"Our knowledge about the water that comes from these drains shows that the limits can never be met," Chrest said. "It's just not worth trying to discharge," he tells farmers, "because there's no room for a mistake."

ALL BUT 12 DISTRICTS SUBMITTED WATER-QUALITY PLANS

By mid-September, 46 of the 58 Montana conservation districts had submitted drafts of their long-range water-quality plans (the deadline was May 30). Most of those plans now have been reviewed by DNRC and WQB and

have been sent back to the districts for revisions. The districts haven't had time to revise and return the plans.

"Most of the districts have included the criteria in the plans to meet their (1978) agreement with the state," said Ken Chrest, in charge of reviewing the plans for WQB. "It's at least enough to get us started helping them deal with water-quality problems."

Two members of the DNRC staff, Parham Hacker and Deeda Richard, have been traveling around the state helping the districts revise their plans.

It doesn't take a statistician to see that 12 districts have submitted no plans at all. About that, Chrest is glum. "Some of the districts have simply told us they have no water-quality problems," something Chrest finds highly unlikely considering the magnitude of nonpoint-source pollution in Montana.

Such a recalcitrant response puts Chrest in a quandary. "Should we go out (to their districts) and look for ourselves or should we let the district supervisors reconsider their stance, give 'em time to think it over?" Chrest worries about what will happen if he takes on the job of identifying a county's water-quality goblins. "I'll be looking for all sorts of problems, including point-source pollution. A local feedlot operator, for example, might be angry at his district if I come down hard on him for polluting when the district supervisors could have prevented my inspection by submitting a good plan. A plan would have given the supervisors and the feedlot owner a chance to work together on his problem before state enforcement officials entered the picture."

Chrest emphasized that other districts' plans aren't naming names of polluters for state pollution-control officers, but are a way of letting district supervisors clean up the site. "I much prefer working through the supervisors, and their plans and education programs," he said. "Local control is still better and I'd prefer to keep it that way."

But Chrest points out that he'll probably start making field investigations in the spring in those districts from which no plans are received. "There's time left for those districts, with our assistance, to draft a water-quality plan."

What if a conservation district really doesn't have any water quality problems? What then?

"Then the district should at least write an education-information plan to help citizens maintain their good water quality in that county," Chrest answered. "That would satisfy the agreement."

SPECIAL INFORMATION-PROGRAM PACKAGE MAILED OUT TO DISTRICTS

A special three-part information package was mailed out in August to every conservation district in Montana by DNRC's Conservation Districts Division. The package, written by the Water Quality Bureau, contained a

history of the 208 Program that puts the recently-completed water-quality plans in perspective, a sample news release about a fictional water-quality plan (to serve as a model for each district's own news release), and instructions on how to establish a working relationship with the news media.

Several districts had requested such a package to help them kick off their information programs. It is intended that each district take the history and a news release about their water-quality plan to the newspapers and broadcast outlets in their areas. Instructions emphasized that personal contact, not mail, was the best way to convey the importance of the district's role in water-quality maintenance.

Charles Wood, WQB's information officer, also offered to help districts write their news releases and establish a continuing education program.

AN EDITORIAL

Give me a staff of honor for mine age,
But not a scepter to control the world.

Wm. Shakespeare

A RESPONSIBILITY BROUGHT BACK HOME, BUT NOT DIMINISHED

by Terry Wheeler, resource conservationist
Dept of Natural Resources & Conservation

Lo'cal -- pertaining to, characteristic of, or restricted to a particular place.

Con·trol' -- prevention of the flourishing or spread of something undesirable, manage, govern, rule, restrain.

The dictionary defined it, Shakespeare refined it, and in the autumn of 1980, the people demanded it. Local control.

There are some very positive assumptions associated with local control:

-- It implies that people are willing to regulate their own activities for the benefit of all;

-- that the people affected by a situation know the most about the situation;

-- that if restraints are necessary, they'll be more acceptable coming from neighbors and friends,

-- local control should be more efficient because there are no other levels of government through which the control must pass;

-- and there is far less need for other levels of government if self-regulation works.

The success of local control, however, depends on the answers to the key questions: Are people really willing to regulate themselves? Do they really know what's going on and, if they don't, will they make an effort to learn? Will local people be aggressive when dealing with problems, even if solutions affect themselves and their friends? Are they willing to wield the staff of honor as a price for keeping out those scepter-swinging outsiders?

Local control doesn't mean "Go away and leave us alone." Effective local control means residents being active, involved, and making decisions that could very well be unpopular. Those people address all problems, not just the ones with easy,innocuous remedies. Local control takes time, it takes aggressiveness, it takes fortitude.

"There's too damned much regulation!"

"Ah, but did we in this county do everything we could to address the problem the regulations cover? Or did we fail to recognize it?"

"Hell, we ignored it!"

When problems ascend to state and national significance, local people are not regulating themselves. This isn't a defense of state or federal regulations, but someone has to maintain stability in society and resource. Mandatory controls, cost-sharing incentives, grants, education programs -- these are attempts by those "higher up" to do what those "locals" were unable to do.

There is a place for all levels of government. Higher levels of government should be used as a resource. Within our state and national governments is a mother lode of people trained in almost any field you can imagine -- a technical resource available to local government. There's also a financial resource in higher government, built in to assist people with projects they would not otherwise be able to finance. This money is provided because much of the work being done benefits the entire public and not just one individual.

Government seems acceptable as a repository for money and advice. It becomes unacceptable when it takes the scepter off the mantelpiece and begins to regulate, govern, or restrain. As I stated before, state and national government loves to rush in where there's a vacuum, and the bigger the unresolved problem, the louder the whoosh of the inrushing regulations.

Sometimes, however, enlightenment prevails, even among the faceless

louts of federal and state. They're beginning to give the jobs of addressing problems back to the local citizens, who are the problems' creators and the problems' victims. And they're still offering that technical and financial assistance, to boot.

Lest we think this is an inspired, new form of governmental largess born in the last decade, let's remember that the Montana Conservation District Law of 1939 said it's up to the districts "to protect and promote the health, safety and general welfare of the people of Montana."

The Montana Streambed and Land Preservation Act and Section 208 of the Federal Water Pollution Control Act are just recent attempts to revive that dying concept and are tools to help the districts -- the local people -- do the job.

Local conservation districts have accepted this major, new challenge affecting our nation and state: to clean up and maintain the quality of our water. Can the effort succeed on the local level? It can and will if someone there will pick up the gauntlet.

MORE NEWS ABOUT MONTANA'S WATER

REPORT SHOWS 13 STREAMS WON'T MEET GOALS SET BY CONGRESS

All of parts of 13 Montana streams will not meet the 1983 clean-water goal set by Congress, concluded a report released by the Water Quality Bureau. Titled "Water Quality in Montana - 1980," the 250-page document is the first comprehensive water-quality inventory for Montana since 1976. The inventory is required by Congress (who knows it as the 305b Report) to show the progress Montana is making toward the goal of having every lake and stream "swimmable and fishable" by July, 1983.

Loren Bahls, head of WQB's water-quality management section, coordinated the report's compilation. "Although we've identified 19 problem streams, problems on six of them should be corrected by 1983," he said. "However, we'll probably be adding more streams to the list as more data come in." He placed most of the blame on nonpoint-source pollution, such as agricultural runoff, mining and forestry problems and streambank erosion.

Some of the "problem streams" already have been slated for special clean-up projects under the bureau's statewide water-quality program. Some of the problems will be remedied by improvements to municipal sewage-treatment plants.

Since the latest report was prepared four years ago, a number of new tools have been developed for assessment of water quality in Montana. These include a fishery data base, computerized data, and a biological monitoring program. Also in the past four years, a massive amount of

information has been collected on nonpoint-source pollution by state, areawide and Native American water-quality organizations. Monitoring programs by five federal agencies and the state -- which will be used to compile future trend assessments -- are described in the report.

"The report covers virtually every watershed in the state," Bahls said. "A person can pick up a copy and find out the chemical and biological characteristics of a favorite body of water." The report is being made available through the state library to every major public library in Montana.

Some of the report's highlights:

- At 86 Montana sites that have been monitored continuously for several years, 17 of them had, in 1978, one or more parameters that exceeded water-quality standards or criteria. Between 1975 and 1978, conditions improved for 9 station-parameter combinations, but were degrading for 41. "But this is an insufficient data base," Bahls said, "and it doesn't really reflect the water-quality trends statewide. Data we put together in 1980 and in future years will give us a more accurate picture."

- Threats to groundwater are increasing in Montana.

- Dewatering, sediment and salinity are Montana's "Big Three" water-quality problems.

- Eight major fish kills have occurred since 1976. Agricultural pesticides were blamed for most of them.

- Potential ammonia-toxicity problems have been identified at 35 municipalities that discharge wastewater into state waters.

- Water pollution control programs and staffing expanded dramatically during the 1970s in response to public demand for water-quality protection. However, state legislators' support for the program has waned and funding levels are static or receding.

- An estimated annual expenditure of $1.25 million will be needed by FY 1983 to develop control programs for nonpoint-source pollution in Montana.

The 13 streams that will not meet the 1983 goals are:

-- Muddy Creek near Great Falls (because of excess sediment and nutrients from irrigation systems and farming practices);
-- Prickly Pear Creek near Helena (dewatering and nonpoint pollution);
-- Silver Bow Creek near Butte and Anaconda (municipal and industrial discharges;
-- Bozeman Creek at Bozeman (fecal coliform concentrations and other urban pollutants);

-- in the Gallatin Valley are Camp Creek (fecal coliforms), Cement Creek (sediment), Dry Creek (fecal coliforms), Godfrey Creek (fecal coliforms);

-- Elk Creek in the Madison Valley (fecal coliforms);

-- and in the Flathead Valley are Hot Springs Creek (high temperatures, dewatering and municipal discharges), Crow Creek (fecal coliforms from agricultural activities), Mission Creek (fecal coliforms from agricultural activities, and high nutrient values), and Post Creek (fecal coliforms from agricultural activities, and high nutrient values).

POOR OILFIELD MAINTENANCE PRODUCES POTENTIAL THREATS TO WATER

Not all of the oil being produced in Montana is ending up in automobiles and furnaces. Some of it is ending up on the ground. And an inspection of northcentral Montana oil-drilling sites this summer by the Water Quality Bureau showed that some of that spilled oil is threatening waterways and waterfowl.

Erich Weber, a WQB technician, inspected an oilfield between Cutbank and the Canadian border on July 23 and 24. Of the 28 sites he looked at, four posed severe threats to state waters. About 15 other sites had oily evaporation ponds which could cause problems, but they weren't near state waters. The area is traversed by the Red River and is filled with pothole lakes.

Weber said, "Those four sites could really cause a problem when the spring thaw comes around and water starts flowing all over the place." Each site has an oil-filled evaporation pond and dikes on several of the ponds already had been breached.

The sites are all collection points for several oil wells. Oil is piped from the wells (several of which had leaking wellheads) over to a tall, cylindrical tank which separates water from the oil. The oil then flows to storage tanks nearby while the water flows to an evaporation pond. The problem is that the water still has a good deal of oil in it when it reaches the pond. "The idea is to skim the oil off the water's surface from time to time," said Weber, "but I didn't see any oil-skimming devices."

At one site, Weber found that a leaking pipeline had filled a large roadside ditch with oil. "Ducks flying over on a winter night are going to think that pit of oil is an ice-free lake and land on it," Weber said. He also checked a USGS map, which showed that site to be an intermittent lake. "When the water returns, there's going to be trouble," he sighed.

At another site, Weber found a sludge pit discharging oily water directly into a natural pothole lake. There was oil sludge present on the lake's shoreline. A third site discharged oil into a coulee.

Much of the problem, Weber said, stems from poor maintenance at the sites, many of which have very old tanks, pipelines and other equipment, some dating back to the 1940s. He found many of the worst-maintained

"First of all, gentlemen, I don't think I have to tell you we're sitting on a lot of oil."

sites were owned by a single oil company, Buttes Oil. "And a Buttes Oil field hand was rather apologetic about it," he said. Sites had leaking wellheads and pipelines, oil all over the ground with no apparent attempts at clean-up, breached dikes, and no attempts to keep waterfowl from landing in oily ponds.

"But there were some sites that are being very well maintained," Weber reported. "Larger oil companies like Phillips and Union 76 had oil sites right on the Red River -- and they were very clean." He said those sites had well-maintained equipment, no oil on the ground, and had flags flapping over the sludge pits to scare waterfowl away.

Many of the sites Weber inspected had shown up as potential problem causers in aerial photos taken by the state in 1978. After that aerial survey, a meeting was held between WQB, the Department of Fish, Wildlife and Parks (DFWP) and the state Oil and Gas Conservation Board. It was decided that WQB should investigate the sites and turn its findings over to the Oil and Gas Board.

Many of the sites in the photos turned out to be on the Blackfeet Reservation and, with jurisdictional problems cropping up, Weber had to leave them out of his field trip.

In the meantime, the oilfield problems came to the attention of the supervisors of the Glacier County Conservation District. According to the July 30 issue of the district newsletter, the supervisors wrote to the state Environmental Quality Council about their concerns. An EQC staff member then made his own inspection of the area. The newsletter also

called for area ranchers who knew of oil-rig problems on their land to write the conservation district about it.

Weber has turned his findings over to DFWP and the Oil and Gas Conservation Board and, in at least one case, to WQB's own enforcement officer. Next spring, he'll go back and take another look.

"There are a lot of problems in the northeast part of the state, too," Weber said. "And next year, we'll also be taking a close look at the big Kevin-Oilmont oilfield near Cut Bank," which a report following a June 1979 inspection by WQB called "a catastrophe with discharging evaporation ponds, spills and leaking wellheads" with "no attempt at maintenance or containment."

FOREST-ROAD COMPLAINT BRINGS AN AGREEMENT BACK TO LIFE

A complaint about poor road-construction practices has resulted in better communications between the Forest Service and the Water Quality Bureau -- in line with the water-quality agreement the two agencies signed last year.

Complaints were received from several different sources that Burlington Northern Inc. was harming water quality in the Jack Creek drainage of the Madison Range with an improperly-constructed logging road. Field investigations showed that several miles of road had been pushed into the forest with at least two sediment-causing stream crossings. Under the agreement, the Forest Service should have notified WQB about BN's construction plans so that WQB could determine if the mountain streams were being protected. And a "6g permit" could have been issued by WQB to BN prescribing proper construction practices and allowing the company to muddy the streams temporarily during construction, if it were necessary.

However, there was no notification from the Forest Service -- or from the Department of Fish, Wildlife and Parks which, BN said, reviewed the plans. BN said no one in government had told the company that a 6g permit was required. A BN official also claimed that the waiting period required after BN applied for a "310 permit" from the local conservation district made it necessary to cross the streams before the company was allowed to put in the needed culverts.

Three parties involved -- the Forest Service, BN and WQB -- only started communicating about the project after the damage -- and some friction -- had surfaced. But the end result may be positive.

"I guess we had all gotten a little passe about the agreement after it was signed," said Kit Walther, WQB's Statewide Water Quality Program Coordinator. "The Jack Creek episode has given us a little kick in the rear and the agreement a good shot in the arm." Walther said subsequent discussions with the Forest Service has helped strengthen communications. "Lately we've received a real good response from several national forests

around the state," he said. "They've gotten very good about notifying us when a project may affect water quality."

Meanwhile, Burlington Northern has submitted to WQB a plan to improve stream crossings and protect the Jack Creek watershed. Kevin Keenan, WQB enforcement officer, said the plan looks "excellent" and "very comprehensive." BN says its erosion-prevention plans were in effect long before the Jack Creek complaint was raised.

SNAGS GET IN WAY OF TWO-COUNTY FORESTRY PROGRAM

A program to control nonpoint-source pollution in forestry in Missoula and Mineral Counties is a bit slow in getting under way.

The Forestry Division of DNRC and the Water Quality Bureau had signed a contract last spring to start the program on July 1. The contract allocated a total of $34,000 to hire a forester with water-quality expertise to work in the two counties with some staff support. But Kit Walther, 208 Program coordinator, said budget amendments for that contract are still being worked on and the program should start when those amendments are finalized. "In the meantime, the Forestry Division has begun advertising for a forester," he said.

When a forester finally is hired, he or she will work with private landowners, loggers and industry to encourage the use of best management practices. The forester also will provide before-and-after reviews of timber harvest operations on private lands and would conduct some educational programs for loggers and industry foresters.

WQB decided it's best to concentrate the forestry program on two counties for the time being to make the most out of limited funds set aside for forestry.

STATE STUDIES MONTANA LAKES FOR POSSIBLE RESTORATION PROJECTS

State agencies are studying Montana lakes to see which ones might qualify for restoration under a federal program. The EPA would like to have by Jan. 1 a list of lakes which might be candidates either for feasibility studies for restoration or for actual restoration. The feds then would grant up to $100,000 to study a lake (on a 70% federal-30% non-federal matching basis) or an unlimited grant (on a 50-50 match) to restore it. WQB's Abe Horpestad said, "Public interest is important. If the public shows its desire to come up with a match, the lake they are concerned about will go high on the priority list."

Unfortunately, the public has shown little interest or has little knowledge about the program, and no Montana lakes are on the list so far. However, the program already is funding work on two Montana lakes: a feasibility study on Georgetown Lake near Anaconda, and restoration of

Sacajawea Lake at Livingston. However, the state is actively studying its lakes to see which ones might be put on EPA's second list, which has a Sept. 1, 1981, deadline. The Water Quality Bureau is coordinating the survey "which will examine at least 300 lakes," according to Horpestad. Fish, Wildlife and Parks personnel are searching through their data and interviewing their regional biologists for lacustrine information (they've completed work on about 50 lakes so far) and many lakes are being spot-checked, especially for chemical data, by UM's Yellow Bay Biological Station.

An MSU limnologist will compare eutrophication models to Montana lakes and do some on-site investigating. "We're also getting data on demographics and geography," Horpestad said. The Water Quality Bureau will be responsible for coming up with Montana's priority list for the EPA.

Under the program, lakes can be restored from almost anything that impairs Man's use: too many plants or algae, extreme siltation or shallowness, regular winter kills, etc. "Cosmetic" ills, however, do not apply, Horpestad said. Cosmetic work would be those jobs done annually to maintain a lake, such as weed harvesting, chemical treatment to keep down algae growth, and repair of boat ramps.

STATE PHONE HANDLES HAZARDOUS-MATERIALS EMERGENCIES

Montanans who need help after an accident involving hazardous materials have someone they can call. The state's emergency phone-answering system has been expanded to include quicker handling of hazardous-materials spills by coordinating action between agencies.

Greater emphasis on hazardous-materials incidents is an offshoot of the volcanic ashfall and the 1979 PCB spill in Billings. George DeWolf, of the state's Disaster and Emergency Services, said his office mans the telephone around the clock and that anyone may call the number, 449-3034, when a "bona fide emergency" occurs. His office then contacts immediately and with all the necessary information the agencies that can handle the situation.

DeWolf said the one-number system has been in effect for several years and "is now really beginning to work." He added, "Not a day goes by that we don't receive a call over the emergency phone." Calls concern anything from awful weather to accidents to erupting volcanoes. "We got a call the other day from Plentywood saying they needed rabies serum," DeWolf said. His office found the serum and had the National Guard fly it up from Helena. A special procedure for handling hazardous materials accidents went into effect Sept. 1. Members of the Department of Health and Environmental Sciences can be contacted with 15 minutes -- they're on call 24 hours a day -- by DeWolf's office after a phone call comes in.

Although in its infancy, the improved procedure already has paid off. Someone called the statewide number after a tanker truck overturned and

spilled oil into Swan Lake. The duty officer manning the phone contacted the Water Quality Bureau "immediately," said Dick Pedersen, the bureau's emergency-response coordinator. "We then quickly advised the trucking company to get hold of a company that specializes in cleaning up such spills," Pedersen said. "That oil would have spread all over the lake had the right people not been notified at once."

Other hazardous-material accidents handled over the phone system already include a gasoline spill near Garrison, a chlorine gas leak near Decker and an accident near Glendive involving a truck carrying radioactive wastes.

The Water Quality Bureau gets involved if the hazardous material threatens state waters. "If we feel the situation is not being handled adequately by local emergency officials at the site," Pedersen said, "then our bureau gets someone out there. We can even activate the Environmental Protection Agency's regional emergency response team."

COPIES OF AMENDED WATER-QUALITY STANDARDS AVAILABLE AT WQB

Proposed amendments to the Montana water-quality standards have been approved by the state Board of Health and Environmental Sciences and went into effect Aug. 1. Copies of the amendments, which clarified the former standards and reclassified the level of water quality to be maintained in most eastern Montana waters, were to be ready for distribution by mid-October. Copies may be obtained by writing or calling the Water Quality Bureau.

Abe Horpestad, WQB's environmental program supervisor, said approximately 100 persons attended public meetings on the amendments, and that comments received brought about some changes in the original proposals. Among other things, the amendments allow the possibility of "mixing zones" where any wastewater discharge meets a state water. The mixing zones could have a lower-quality water than the state water.

The amendments also:

- Reduce duplications between the standards and the state's Natural Streambed and Land Preservation Act. This amendment will cut red tape for farmers and others carrying out streambank alterations.
- Make clear that the Department of Health and Environmental Sciences may require that a monitoring system be installed and operated if the department determines that pollutants are likely to reach surface waters or present a substantial risk to public health.
- Update and clarify the references which define the "toxic levels" of polluting substances.
- Clarify how standards apply to ephemeral (usually dry) streams.

- Clarify the definition of "surface waters" and make clear that the standards apply only to surface waters. Sewage lagoons and tailings ponds are excluded.

The majority of eastern Montana's streams were reclassified by the amendments to recognize that their water quality is poorer than originally thought. But, Horpestad said, that will allow the state to protect them more easily. "It's poorer quality water, but it's the only water available out there," he said, "so we'll try to maintain it for its present uses. That will be easier to do now that the standards accurately reflect natural stream conditions." The downgrading of the eastern Montana streams caused the most controversy during the public meetings.

"NON-DEGRADATION" REGULATIONS DRAFTED, PUBLIC MEETINGS UPCOMING

Regulations have been drafted to carry out the Water Quality Act's "non-degradation policy." At least three public meetings will be scheduled in various parts of Montana in November for citizen input.

The Montana Water Quality Act requires "that any state waters whose existing quality is higher than the established water quality standards be maintained at that high quality unless it has been affirmatively demonstrated to the board (of Health) that a change is justifiable as a result of necessary economic or social development. . ."

Abe Horpestad, who is in charge of drafting the regulations, says the new rules "will allow people to follow the law and still use the water." Copies of the draft regulations may be obtained by writing the Water Quality Bureau, DHES, Room A206 Cogswell Bldg., Helena, 59601.

UPDATING THE PROJECTS

SPORTSMEN TAKING THE LEAD ON THE PRICKLY PEAR

A local Helena Valley sportsmen's association is taking the lead in the attempt to clean up Prickly Pear Creek. The Prickly Pear Sportsmen volunteered to put together a citizen task force to run the project following a 1979 tour of the creek that was organized by the Water Quality Bureau. Jim Richard, the association's president, said his group has mailed out letters of invitation to people representing the diverse interests that have an effect on the creek: agricultural, industrial, legislative and residential.

Meanwhile, several government agencies, including the Lewis and Clark Conservation District, WQB, BLM and SCS, completed a thorough streambank

inventory on the creek in August. About 10 persons walked segments making up the 40-mile length of the creek, mapping streambank problems on aerial photos taken earlier this year.

The Department of State Lands is working to put together a proposal that seeks funding for clean-up of mine damage in the upper Prickly Pear drainage. The federal Abandoned Mine Lands Program used to pay only for coal-mine reclamation, but has since been amended to include abandoned hard-rock mines if those mines threaten public health or safety. In a package to be sent to the governor's office, DSL and WQB will show evidence of well contamination, contamination of surface water that is being used for drinking, livestock deaths, and even destruction of gardens and plumbing by water polluted by mines and tailings.

If the governor's office approves the proposal, it will be sent on to Washington, D.C., where the Office of Surface Mining will decide if it merits AML funds. It could be a first: no hard-rock mine in the West has ever been cleaned up with AML funds.

AN ANALYSIS OF BLUEWATER CREEK IS COMPLETED BY CONSULTANT

A big step has been taken in the Bluewater Creek Project in the Carbon County Conservation District southwest of Billings. A private consultant has completed an analysis of the troubled lower portion of the creek, near Fromberg. Along with streambank protection practices, the analysis recommends the building of three drop structures in the creek to help dissipate the water's cutting power. The report estimates the structures would cost a total of $73,000.

The analysis, which outlines the funding needs for the project, has been submitted to DNRC to be part of DNRC's Renewable Resource Development application to the legislature. Carbon County CD received a 208 grant from the Water Quality Bureau to pay for the private consultant, and will seek money from several sources for further work on the creek.

MUDDY CREEK PROJECT GETS $200,000 FROM OLD WEST

The Old West Regional Commission has agreed to grant $200,000 to the Muddy Creek Project for on-farm management practices, such as construction of concrete ditches and buried mainlines for sprinkler irrigation systems.

Such practices will increase the efficiency of the irrigation system on the Greenfield Bench northwest of Great Falls and reduce the impact of irrigation on Muddy Creek. Sediment-laden Muddy Creek now is harming the quality of water in the Sun and Missouri Rivers.

LIBERTY COUNTY HOLDS TOUR, LOOKS INTO DEMO PROJECTS

Liberty County Conservation District featured its top-priority water-quality problem -- saline seep -- in a water-quality tour on Sept. 25. About 12 persons attended. On the four-stop tour, the group looked at:

-- The Joplin sewage lagoon from which wastewater is used to irrigate a 10-acre hay field;

-- the Triangle Saline Seep Project's monitoring well and drilling operation on the seep-plagued Dale Gunderson farm;

-- former seep land reclaimed by farmer Arlo Skari who lowered the water table by planting alfalfa and Russian wild rye (District Conservationist Mike Linsenbigler said Skari defeated the seep "by changing that piece of land from a crop operation to a cattle operation");

-- and an animal waste lagoon at the Bill Cole pig operation north of Chester.

Linsenbigler said the Liberty County CD also is looking into the possibility of setting up a saline-seep demonstration project "that could solve an area problem, not just an individual farmer's problem." He said five or six farmers in one area "where saline seeps are interconnected" have expressed interest in taking part in such a project. The district has discussed possible funding for the demonstration project with WQB and DNRC's Conservation Districts Division.

LINCOLN COUNTY PICKS BRAINS BEFORE PICKING POCKETS

The Lincoln County Conservation District's headquarters at Libby has been a busy place lately. Rather than wait around to see what funding their long-range plan generates at the state level, the district supervisors have begun some tactical movements against the county's water-quality problems. And they're not hesitating to borrow other people's expertise.

Listed as the district's top-priority problem, streambank slumps in the Fisher River have caused the area's worst siltation. Russ Hudson, district chairman, said the district was in the midst of drafting a model bill for the 1981 Legislature for implementation funds when they realized "that without feasibility studies and proper planning, we wouldn't get to first base." So the district has asked -- as a prudent first step

toward correcting the Fisher River problems -- a private consulting firm to prepare a proposal for such studies. Payment for the studies might be eligible for 208 funds administered by the Water Quality Bureau (on a 3-to-1 matching basis). And then, after studies and plans are completed, Lincoln County should have a much better chance to receive legislative funds for corrective measures, Hudson feels.

The district also was looking closely at its Number Two Problem: residential development and its effects on groundwater. Again, prudence prevailed. "That's something the state Department of Health and Environmental Sciences is looking into," Hudson said, "and since they've got more resources than we, we'll let them do it." WQB currently is developing a groundwater-pollution study, for the whole state, not just Lincoln County. A Third Priority Problem, however, is now getting personal attention from the supervisors. To combat erosion and sedimentation from road construction, Hudson said, the district is evaluating the outcome of seeding trials by the Plant Materials Center of the Kootenai National Forest. "We hope to use recommendations from those trials to set up guidelines for seeding along new roads and railways." This in an area criss-crossed by logging roads.

In what could be called a "tactical retreat," Lincoln County CD abandoned its plans to publish forestry-practice guidelines when the supervisors discovered that at least four other such books had been published elsewhere. "We're going to work on making those books available to loggers instead," Hudson said.

Other inroads for water quality are being made in the Lake Creek Valley south of Troy, targeted for a giant mining project by Asarco and heavy residential development. The district is undertaking what Hudson called "an emergency soil classification project" through SCS. "The Geological Survey is working on a groundwater survey," he said, "and SCS and the Department of Fish, Wildlife and Parks is doing a survey on Lake Creek." All that, along with the low-level aerial photos the district had made last April, should give Lincoln County folks a good idea of what they're fighting for in Lake Creek Valley.

A DISTRICT SPONSORS A CRUISE DOWN THE BEAVERHEAD RIVER

A small flotilla of ranchers, conservation district supervisors, state officials and irrigation district officials took a look at improvements in the Beaverhead River in late summer.

The floating tour, sponsored by the Beaverhead Conservation District, was made up of about 18 persons who boated a few miles of the river down from Pipe Organ Bridge. The tour's emphasis was on the improvements in the management of the Clark Canyon Dam which have reduced fluctuations in the Beaverhead and made for more constant flow. Fish and wildlife experts shocked fish for the participants and explained that the Beaverhead fishery has improved significantly since the changes were made. Tour leaders also briefly discussed the Beaverhead's riparian vegetation.

RANCHER'S PLANS HIGHLIGHT TOUR OF GALLATIN RIPARIAN

Rancher Russ Sime is fencing off a river for "purely selfish reasons." "I hate government regulations," Sime told 30 onlookers in what may have been the highlight of a tour of riparian areas in the Gallatin Conservation District. But Sime admitted that the fencing has become necessary since cattle have contributed to streambank destruction that has allowed the cantankerous Gallatin River to destroy valuable land.

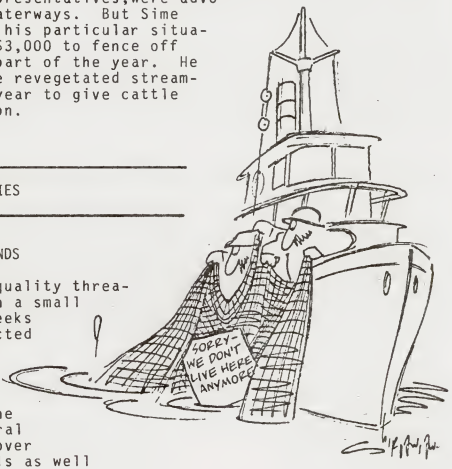
The July tour, sponsored by the Gallatin CD and the Water Quality Bureau, was put on specially for members of the fish and wildlife subcommittee of the Rural Area Development Committee. The objective was to look at the extent, condition and management of riparian (river bottom) lands near Bozeman. The participants saw contrasts between grazed and ungrazed banks on Bridger Creek, saw where a compromise between the conservation district and a developer left a 60-foot-wide strip of riparian vegetation in its natural state, and saw houses built within a few feet of streambanks and natural vegetation replaced by manicured lawns. The group headed up Hyalite Canyon where the Forest Service explained multiple use practices, then back down to Sime's ranch on the Gallatin.

"Twenty years ago, my dad used car bodies and cables to try to control the river," Sime explained. "But now I'm convinced you must leave the river alone and let it seek its own channel." No one on the tour, even the Water Quality Bureau representatives,were advocating the fencing off of waterways. But Sime thinks the best practice in his particular situation is to spend $2,000 to $3,000 to fence off the Gallatin, at least for part of the year. He says he plans to open up the revegetated streambank for a short time each year to give cattle shelter during calving season.

SHORT STORIES

DEER FENCED OUT OF METAL-LADEN PONDS

Mining impacts on water quality threatened to disprupt hunting in a small area of Montana. Several weeks ago, heavy metals were detected in water samples from tailings ponds near a mine in Cox Gulch in Sanders County where deer and elk had been seen drinking. The mine operator and state and federal officials became concerned over potential harm to the animals as well



as to humans who might eat meat from game animals that had ingested high concentrations of heavy metals. Archers, whose hunting season opened Sept. 6, were warned away from that area and three deer were "collected" near the ponds for laboratory testing.

Subsequently, however, the Department of Health and Environmental Sciences said the test results show that the levels of metal in the edible meat samples were all within acceptable levels for human consumption. Meanwhile, the mine operator voluntarily has completed the fencing of the ponds to keep big game animals out.

TOXIC ALGAE CLOSED LARGE RESERVOIR FOR A MONTH

Nelson Reservoir northeast of Malta was closed to public use during most of August after a bloom of toxic algae killed 17 cattle. The three types of potentially-lethal, blue-green algae that occur in Montana (their Latin names shortened to Annie, Fannie and Mike) all showed up in succession at the large lake after a spate of hot weather. The city of Saco was advised by the state Board of Health and Environmental Sciences to switch to a different water source. The water from the well to which the city switched was so bad, however, some people hauled water from elsewhere.

The closure was lifted near the end of August when the blue-green algae began dying out and the normal autumn succession of non-toxic algae began replacing them.

A small dose of the blue-green algae killed a mouse in a matter of seconds, and biologists warned that a mere quart of the toxic water, even if consumed over an entire day, could kill a human. Nelson is only the second major impoundment in Montana to be closed by a toxic algae bloom. The other was Hebgen Lake in the summer of 1977.

BOZEMAN KIDS LEARN RELATIONSHIP BETWEEN LIFE AND CLEAN WATER

Nearly 350 sixth-grade students from Bozeman learned the relationship between clean water and living organisms during the six-day Environmental Education Workshop in the Bridger Mountain foothills in early October. A site on Ross Creek, manned by instructors from the Water Quality Bureau, was one of several outdoor "learning stations" the Willson Middle School students visited. The students actually waded into the creek, netted aquatic insects from the stream bottom, identified them and learned why the bugs, like people, need unpolluted water.

STATE LANDS OFFICIALS GIVEN TRAINING IN WATER SAMPLING

The Water Quality Bureau and the Department of State Lands are negotiating a contract that would encourage water monitoring at small mine

sites by DSL. Gary Ingman, WQB environmental specialist who trained DSL staff members in water sampling, says he thinks the course has given DSL a better understanding of mining impacts on water quality.

About 25 State Lands staff members attended the workshop last April. They included coal mine and hard-rock mine inspectors, field inspectors for the open cut bureau, and people from DSL's regional offices. "Only a couple of them had attended such a course before," Ingman said. The participants were taught about mining impacts on water from acid mine drainage, heavy metals and sedimentation, and then were taken out in the field and taught sampling techniques, from choosing a good sampling site to preserving the water samples and delivering them to the lab. They were also shown how to take field measurements of stream flow, pH, temperature, etc.

"We want the Department of State Lands to help us document the problems right where they suspect the problems exist," Ingman said. He said another workshop would be held for DSL next spring "if that department wants it."

FILMS ON SALINE SEEP AND STREAM RIPARIAN ARE COMPLETED

The Water Quality Bureau's two film productions have been completed. The 12-minute films dealing with saline seep and streambank vegetation will receive their debut at the statewide conservation district convention in Kalispell on Nov. 10.

Titled "The Saline Solution" and "Stream Riparian," the films will be made available to conservation districts and other groups later this fall. Groups can get on the waiting list now by contacting the Water Quality Bureau. One video tape print of each also has been made and WQB hopes to get them on TV stations around the state. The film prints can be mailed to any group desiring them, or they can be brought to meetings by "experts" on each subject who can discuss the material with the group after the film is shown.

Public service announcements for television also have been produced on each subject, and are expected to be distributed to TV stations in January.

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TO:

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